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ABSTRACT

This paper describes the development of a framework to better understand how teachers think about and approach instructional practices. Over 1 year, researchers worked with teacher groups in 5 schools, exploring their perspectives, experiences, and understanding about teaching through observations, interviews, journals, and dialogues. The researchers created a framework that described the teachers' many messages and ideas. Four domains organized teachers' thinking: curricular context, assessment and student data use, instructional practices, and professional vision of teaching. Each group had ways of talking and acting that influenced the extent and pace of their discussions. Groups voice quickly suppressed individual teacher views. There were four distinct tensions in how teachers described their work: Who is responsible for student performance? What does it mean to work with other teachers? What is happening in the classroom? and What is the big picture? Individually, teachers identified tensions that connected to tensions noted in group conversations. The tensions related to responsibility, professional culture, and focus on learning. Each tension had many dimensions and polarities. Within these collegial communities, teacher developed their confidence and refocused their practices, moving from habits of thinking mostly about the instructional problem to habits of thinking first about the learner. (Contains 28 references.) (SM)

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A synthesis of work in five study sites

by

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Southwest Educational Development Laboratory
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Running Head: Understanding teachers' perspectives

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Understanding teachers' perspectives on teaching and learning

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Introduction

Classroom instruction is a critical component of the educational system: some would say the *most* critical component, "where the rubber meets the road." And for meaningful learning to be an outcome of instruction, teachers must clearly understand how to adjust and refine their practices to address students' needs. Yet in spite of the central role that teachers' understandings of teaching and learning play in helping teachers address student needs, we know very little about how and why teachers do the things they do in classrooms, or about how to help them make the best decisions for their students.

To better understand the way teachers think about and approach instructional practices, we worked for over a year with groups of teachers in five sites, exploring their perspectives, experiences, and understandings about teaching through observations, interviews, journals, and dialogues. We listened carefully to teachers as they described how they lived through the everyday reality of their classrooms. As we listened, we looked for ways to characterize and differentiate the diverse understandings and varied approaches teachers use to negotiate that reality. Over time, we began to distinguish commonalties in the reports and conversations. Patterns began to emerge; relationships became apparent. Ultimately, we created a structure to relate the messages from many voices, one framework that described and connected the variety of teachers' messages and ideas.

This paper describes that framework and the evidence we considered during its development. The framework is bounded by a matrix of four domains and six crosscutting dimensions. Within this deceptively simple matrix we can locate teachers' perspectives on their practice and over time track changes in the way teachers approach instructional decision-making and are influenced by professional development. With a clearer picture of what drives teachers' instructional decision-making in hand, we can help teachers make their students' instructional learning experiences as meaningful as possible.

Refocusing reform on practice

The national systemic school reform effort has assumed that sending clear and consistent signals to teachers, students, and parents about what is important to teach and learn is an essential element of school improvement (Knapp, 1997). As a consequence, the focus for the past decade has been on creating and aligning policy instruments such as curriculum frameworks, standards, and assessments (Cohen & Spillane, 1994; Fuhrman, 1993; Goertz, Floden, & O'Day, 1996). Although those promoting systemic reform "seek much more coherent and powerful state guidance for instruction" (Cohen, 1995, p. 11), the experience of policy alignment in at least one state suggests that this strategy has yet to provide significant assistance for practitioners. Cohen said that

> While systemic reform brought a broad drift toward intellectually more ambitious instruction at the state level [California] for about a decade, thus far it has not brought more coherence to state guidance for instruction.... The guidance for instruction that many local central offices offer to schools has begun to shift in the direction of reform, but that shift has so far not been accompanied by greater local coherence...Reforms that seek more coherence in instructional policy have helped create more variety and less coherence.... State guidance added messages, but so did local agencies. Nothing was subtracted. (p. 12)

There is little evidence to suggest that recent policy reforms focused on improving instruction have had any significant impact on teachers' actual classroom performance. Although teachers are making instructional decisions in a more fluid context (including new policies, new ideas about learning, instruction, and assessment, and many programs that claim to reflect these new ideas), the very multiplicity and diversity of messages about improving classroom practice confounds the decision-making process for teachers. Teachers interpret these messages in very different ways depending on their experiences,

beliefs, students, and school culture. Thus, the way a particular reform idea is implemented will vary greatly from teacher to teacher and may be quite different from the expectations of the reformers (Jennings, 1996; Grant, Peterson, & Shojgreen-Downer, 1996; Peterson, McCarthey, & Elmore, 1996). From their study of how teachers implemented a mathematics curriculum reform, Grant et al. (1996) concluded that teachers are not adequately supported in their efforts to make connections between new ideas presented as reform and the enactment of these ideas into practice.

In the current reform climate, teachers have little time and less guidance to learn—or rethink and relearn—how learning takes place or how their instruction can be modified to take learners' needs into consideration. Many teachers make instructional decisions based simply on their immediate needs to comply, survive, conform, or meet a time constraint (Hargreaves, 1994). It is easier for them to rely on external sources of authority, such as curricular documents, assessments, textbooks, and teachers' guides, to provide the guiding vision for their instruction than to rethink and reform that practice. Reliance on external materials —designed for use across a large number of classrooms by a diverse group of teachers with some typical student— *can* promote teaching that is routine and unthinking. Yet, as Coldron and Smith (1995) contend, "teaching which is routine and unthinking sells pupils *and teachers* short [italics added]; learning to teach and sustaining professional development require reflection which is closely linked to action" (p. 1).

In a similar vein, Elmore (1996) argues that changing the structures of schooling will have little impact on how and what students learn unless there are also changes in the "core" of educational practice (i.e., how teachers understand knowledge and learning and how they operationalize their understandings). Therefore, what Cohen (1995) calls "coherence in practice" depends more on how teachers understand, interpret, and internalize the reform messages for their own practice than on the alignment of those messages at any policy level.

Proliferating policy directives are not the only source of confusing messages for teachers. Hargreaves (1994) maintains that the very act of working in an increasingly complex world in itself challenges the way teachers think and act. Situating the work of teaching in the wider social context, Hargreaves argues that teachers are being asked to do more, but with less time and support to learn how to meet the new demands. It is worth hearing Hargreaves' argument in full.

> First...the teacher's role expands to take on new problems and mandates—though little of the old role is cast aside to make room for these

> changes. Second, innovations multiply as change accelerates, creating senses of overload among teachers and principals or head teachers responsible for implementing them. More and more changes are imposed and the timelines for their implementation are truncated. Third, with the collapse of moral certainties, old missions and purposes begin to crumble, but there are few obvious substitutes to take their place. Fourth, the methods and strategies teachers use, along with the knowledge base which justifies them, are constantly criticized—even among educators themselves—as scientific certainties lose their credibility. If the knowledge base of teaching has no scientific foundation, educators ask, "on what can our justifications for practice be based?" What teachers do seems to be patently and dangerously without foundation. (p. 4)

Some educators have cautioned that school improvement will only be achieved when there is greater clarity and coherence in the minds of the majority of teachers (Fullan, 1996), and that "coherence in policy is not the same thing as coherence in practice" (Cohen, 1995, p. 16). From this perspective, educational practice will change only when teachers have the support they need to make sense of new ideas and directives, bring them together in a meaningful way, and construct a coherent practice. The success of school improvement thus rests squarely on teachers, and, by association, on those responsible for supporting their professional growth. Darling-Hammond (1996) said that "betting on teaching as a key strategy for reform means investing in stronger preparation and professional development while granting teachers greater autonomy.... we must put greater knowledge directly in the hands of teachers" (p. 5, 6).

Ball and Cohen (1999) discussed teachers' learning, saying

> The knowledge of subject matter, learning, learners, and pedagogy is essential territory of teachers' work if they are to work as reformers imagine, but such knowledge does not offer clear guidance, for teaching of the sort that reformers advocate requires that teachers respond to students' efforts to make sense of material. To do so, teachers additionally need to learn how to investigate what students are doing and thinking, and how instruction has been understood...The best way to improve both teaching and teacher learning would be to create the capacity for much better learning about teaching as a part of teaching. (p. 11)

It is clear enough that, for schools to better address the learning needs of students, teachers must become more thoughtful about teaching and learning. It remains unclear how this is to be accomplished. How can we assist teachers to develop the deep understanding necessary to make instructional decisions that promote student learning? What additional

skills do teachers need to recognize how students have understood their instruction? We need better tools to help teachers consider their teaching issues and concerns, to organize their experiences, and to understand their positions and actions in a systematic way.

To explore these ideas, we selected five diverse school and district sites (rural, suburban, and urban), with one site located in each of five southwestern states. A study group of 12-18 individuals (primarily teachers) participated at each site. The teachers were typical classroom teachers (Elbaz, 1990), rather than teachers who had been identified as master or exemplary teachers or who were selected based on specific criteria such as writing ability. Volunteer teacher-participants received a small stipend to compensate for meeting after school or on weekends. Each group met regularly to talk about their teaching practices at meetings facilitated by project staff and experienced consultants.

Very early in the work (fall 1997), we agreed to focus our attention primarily on teacher's perspectives on curriculum, assessment, and instruction. Much has been written about the need to align curriculum, assessment, and instruction so that students receive a coherent message about what is important to learn and are assessed in a manner consistent with instruction. The teacher-participants, like all teachers, made daily decisions about what to teach, how to teach it, and how to assess their students' learning. In the study groups they described the different pressures they felt impacted their practice and decision-making. They identified a wide array of information, materials, and requirements that influenced their instructional decisions: from state and local standards to textbooks and packaged curricular modules; from state assessments to teacher-made tests; and from instructional strategies learned in college or at workshops to those learned from the teacher across the hall.

Examining how teachers talked about curriculum, assessment, and instruction would tell us much about how they fit these pieces together. We added one additional category to our list—their professional vision of teaching—because we believed that teacher learning and professional development were critical aspects in developing what we were calling instructional coherence. Therefore, we created the following four categories (we called them "domains") to organize our thinking:

Curricular Context: How does the teacher decide what to teach? What are the influences on the content she teaches? How does she talk about national, state, or district standards?

Assessment and Student Data Use: How does the teacher know what his students have learned? What does he know about his students and how does he know this? How does he use student data and test scores in instructional decision-making?

Instructional Practices: How does the teacher talk about her instructional strategies? How does she decide what approach to use?

Professional Vision of Teaching: How does the teacher talk about the profession of teaching? How does he view the study group and the process of learning with colleagues? How does he view professional development?

With these broad domains in mind, we began meeting with the study groups. Over the next year, we observed classrooms, collected and reviewed records of conversations, and analyzed interviews and journals to understand teachers' experiences, contexts, and the meanings they made of these. (Carson, 1986; Clandinin & Connelly, 1994; van Manen, 1990) Our goal was to develop a consistent and usable tool for describing and tracking teachers' understandings over time, a tool that would promote a greater capacity for learning about teaching, both among teachers themselves and those of us that support teachers.

Early findings: group effects

As we began to listen, we quickly noticed that the five study groups had ways of talking and acting that influenced the extent and pace of their discussions. For example, some groups spent a great deal of time talking about all the external factors that made learning difficult for their students. Other groups focused their energy on things over which they felt they had some control. At first this simply appeared to be a difference in the maturity of the groups. But we noticed other differences as well, variations in the ways that groups talked about their classrooms, students, and even the purposes of the study group discussions. Furthermore, the differences appeared to be deeply related to the teachers' sense of self worth: teachers in some discussions felt undervalued and over-worked, while teachers in more positive groups felt more productive and valued by their peers, supervisors, and students. Intrigued, we decided to investigate further.

Johnston and others (1997) described productive tensions in their work with school-university partnerships, saying, "when there were differences, we had to reflect, compare, and adjust our thinking...in this interpretation of tensions, we assume a necessary relationship between differences...we look for interrelatedness. Like the north

and south Poles of a magnet, the differences interact in ways that make them interdependent" (p. 13). In much the same way, we identified expressed differences —polarities— in the ways that our study groups talked together. We came to think of the polarities as tensions in the way that teachers approached their work, oppositional pressures that pulled them toward one pole only to be pulled back by pressure in the other direction. For example, should each lesson be designed to address each and every student's unique needs or to address the needs of most students?

We also noted early in our work that the group voice quickly suppressed the individual views of teachers. Journals and private conversations revealed that many teachers privately disagreed in some way with the group consensus, but were uncomfortable expressing their views in the public conversation. By listening carefully to the quiet but dissenting voices, we began to identify the oppositional poles that framed the conversations, to find the differences that arose from alternative expectations and perspectives. We began to recognize that many of these differences are interdependent. Over time, it became apparent that these tensions were never going to be resolved once and for all, but could only be resolved for a particular situation. Like strategies for dealing with competing claims on teachers' time, helping negotiate these tensions required teachers learn to manage them more effectively. By "management" we do not mean manipulation, but rather the need to make explicit the set of motivations, needs, and contexts that teachers must consider to make an effective decision. One way to manage the conversations was to focus on student learning as the bottom line, the ultimate outcome. Teachers had to think about what was happening in their classrooms in new ways, and were able to talk about their practices without falling into their familiar and comfortable, but largely unproductive, styles of professional interaction.

We heard four distinct tensions in the way that teachers described their work and decision-making. We present them here as answers to common questions about teaching and learning. The first three eventually evolved into critical elements (we came to think of them as "dimensions" about which there will be written more later) of a framework for analyzing the ways that teachers approach their practice. We save the discussion of the fourth until last, as it represents a uniquely different and more profound problem for teachers.

Who is responsible for student performance?

When the teacher-participants first came together to talk with colleagues, one issue high on everyone's agenda was accountability. The teachers felt a need and sensed

an opportunity to speak out about the increasing accountability pressures for student performance being placed on them. Not surprisingly, they initially refused to accept any responsibility for low student achievement or classroom problems, and found solace in placing the blame on external factors—society, tests, standards, the state, central office, student preparation, and so on. Each site exemplified this tendency to some degree.

Teachers at one site felt that if parents had better parenting skills, made better choices, and sent their children to school ready to learn, then teachers could teach students as effectively as they had in the past. They claimed that students were different from those they used to teach, saying that today's students are less mature, lack curiosity, and are generally lazy and disrespectful. All groups spent time "venting," but some tenaciously refused to accept any responsibility.

Another group acknowledged the problems, but then quickly looked at ways their own actions influenced student performance. From the beginning, these teachers questioned how well they were meeting the needs of the students, teaching the content, understanding and implementing their arts-based curriculum, and using student data to inform practice. They were concerned that their criteria for identifying students for the gifted program might not be valid. This concern led to an examination of their own classroom assessment practices and a study of alternative methods and uses of assessments to benefit students. If a teacher blamed outside forces for her problems in the classroom, it was short-lived and not reinforced by the group.

In a study of the ways teachers think about diverse students, Greenleaf, Hull, and Reilly (1994) found that groups of teachers working together could "both challenge and reinforce the harmful view of students" (p. 536). In some groups, there was the tendency to reinforce negative views of parents and students, whereas in others, the tendency was to challenge and talk about negative views and figure out how to improve the situation. The following exchange between a third-grade teacher and the site consultant illustrates a teacher who is beginning to better understand blame and responsibility. Questions from the consultant played a pivotal role in helping the teacher accept her own responsibility. The group was talking about being constrained by tests and the curriculum.

Teacher: They sit down to write the curriculum that we have to teach.

Consultant: Who is ""they?"

Teacher: The state, the district curriculum director.

Consultant: So they write the curriculum and then become the "curriculum police?" [laughter] No, really, do they <u>make</u> the curriculum?

Teacher: Yes, there is a curriculum. There are these ten things I have to cover in science.

Consultant: So what have you covered? [This meeting is in March]

Teacher: Well, I haven't really done many of those because I have other science units that I like better for the kids. [pause] Oh, I guess I do make the decisions.

Consultant: So maybe thinking of curriculum as what we do in our class with our students would help us in our thinking about practice and how we decide what to teach.

The group went on to talk about their responsibility to make thoughtful decisions. In a later journal, this teacher writes, "What can I change in my classroom to improve it for kids?...I can make my classroom more of an environment for discovery and exploration."

Over time, the groups moved away from their original black and white thinking of blame and accountability to a more pragmatic position, one that recognized the critical role that teachers' actions play in student performance, but acknowledged that other influences can be important as well. The early absolute categories seemed founded in the absence of both confidence in and strategies to measure the extent of their impact. When teachers failed to recognize how pivotal their role could be, they were unable to think more deeply or dialogue about how to improve their practice. Helping teachers focus more on what they do have control over in their classrooms and less on placing blame enables them to more easily perceive how important their decisions are for student performance and to accept responsibility for those decisions.

The opposite pole of this tension, that teachers cannot control every learning variable in their classroom, is just as important for teachers to understand and take into account. It frees them from an obligation to successfully resolve every problem students bring to the classroom. Knowing that they cannot possibly be successful with every student every time gives them freedom from the fear of failure, allowing them to take more risks and adjust their practice more quickly. By realizing they are not responsible for everything, they can become responsible for something.

Of course, arguments focused on deficits of students and parents or on constraints from external mandates did not lead to problem solving. However, these conversations helped the groups to develop in important ways. Most notably, these early conversations allowed the groups to explore how to talk and work together around issues of low personal risk. Gradually they built the trust they would need to enter into a much more

risky relationship with one another, where their most troubling professional problems would be on the table and their understandings of teaching and learning deeply exposed.

What does it mean to work with other teachers?

When recruiting teachers for the study groups, we had described their participation as an opportunity to talk with colleagues about teaching and learning and to work with us to understand issues facing classroom practitioners. However, it quickly became apparent that the participants were used to working in groups to solve a particular problem or complete a specific task and had little experience with other ways of working in professional groups. They hesitated to discuss issues in an open-ended format, having no way to value (and very little patience with) the act of sharing their perspectives and understandings with colleagues.

One group had a particularly difficult time coming to grips with the purpose and potential outcomes of open discussion about their practice. They arrived at the first meeting with one task in mind—evaluating the science modules and assigning activities to the appropriate grade levels to create the district's science curriculum. The task seemed straightforward to them in the beginning, and they made numerous references in the meetings and journals to their need to get things done quickly, to complete the task and move on. They resisted being too analytical about their solutions or their motivations as they considered how modules should be distributed the across the grade levels. In one meeting, there was a mini-rebellion when the group collectively said, "Enough of the touchy-feely stuff! Let's get real." For them, getting real meant focusing their attention on the selection of modules, on completing the task in the quickest, most efficient manner.

When the group *did* focus their efforts on getting the task accomplished, however, they realized that decisions about which module went in which grade level would be purely arbitrary unless they were based on a better understanding of how students learned science. As the time approached to have completed the alignment task, the group agreed that their vision of the task had changed significantly. Simply assigning chunks of content to each grade level was no longer seen as an effective strategy for meeting student needs. Instead the group developed a set of principles for quality instruction based on their enhanced understandings of student learning, and wanted to use their new principles to assist in making curricular decisions.

Another group took a different approach to the open-ended nature of the discussions. The teachers just wanted to talk and, at first, they tended to be "venting" rather than reflecting. Group members said that they needed the time to be together.

When one teacher suggested organizing the meetings in longer blocks, "so we can get it over with," another teacher said, "Get it over with? This is what I want and need to do." The group agreed. Although they resisted settling on a focus for study, their conversations became progressively more reflective and insightful.

The tension around the value of professional dialogue provides a good example of the interrelatedness of the two poles. Neither reflection without action nor action without reflection will produce lasting improvement in teaching practice. As time passed, those who felt bound to take action to complete the task found ways to reflect on their classroom practices, and eventually began to make significant changes to improve their practice. The second group chose to look more closely at what they were teaching, with an eye toward purposefulness, and individuals made changes in their decision-making process in light of the group study. Balancing reflection and action are critical in developing strategies to support teacher learning and teaching improvement.

What's happening in my classroom?

When participating teachers felt comfortable enough with the study groups to begin describing in detail their classroom environments and events, they spoke almost exclusively about what they were doing as teachers and only rarely about what the students in their classrooms were doing or learning. We saw this tension as the difference between a focus on classroom teaching and one on classroom learning. Those with a focus on teaching would say, "I teach this content" or "I teach in this way." If they had a focus on learning, they said things like "This is content that is important for my students to learn" or "These experiences would help my students learn this big concept." The essential difference rests with who is seen as the actor, the subject of the discussion. One focuses on the teacher as subject and the teaching act while the other explores the learner and the learning act. The groups that were more focused on dialogue, reflection, and responsibility soon understood the subtle difference between focusing on teaching and focusing on learning. As conversations matured, they began to ask each other "But what does that have to do with learning?"

The teachers in some groups expected to be told how to teach in order to meet the various requirements of the state and district, like most of the professional development activities they had attended in the past. They viewed the facilitator as an expert who would define the questions and give them the answers. One group talked about finding and using different teaching strategies and needing to take time to "teach it over again." A teacher wrote, "I feel that getting a check list designed and printed for my class in all

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subjects will be far more useful to me as a teacher than reading about different learning styles." However, another teacher in the same group noted "sometimes as teachers we focus too much on teaching and are not aware of the learner learning the materials." Her comments were not characteristic of this group early on, and she did not verbalize her feelings until later in the project.

While the teachers at one site started with their focus on teaching strategies and materials, they were willing to struggle with the notion of focusing on learning. They discovered for themselves that they were describing teaching even as they constructed a list of learning principles. As they negotiated the language to rewrite their learning principles, the dialogue was insightful and connected to practice.

It's not a surprise that teachers focus on the teaching act almost to the exclusion of any focus on learning. After all, most pre-service conversations about learning to teach deal exclusively with the teacher as the classroom actor and look only marginally at learning acts. Similarly, content coverage and instructional strategies are the predominant theme of most curricular and professional development reforms: both focus on what teachers do in classrooms, not students. And the pressure to focus on teaching increases dramatically when we hold teachers accountable for what students learn, but provide them with no tools or strategies to assess student learning.

What's the big picture?

The fourth tension centered on teachers' efforts to make sense of the big picture. The teachers expressed a clear need to make sense of their work, especially in the context of the multiple layers of policy and decision-making. They wanted to know why they were doing what they were doing, what were the intended purposes, outcomes, and values driving school policies and practices. But in their early conversations, teachers found it extremely difficult to get beyond stories and specific incidents. Furthermore, they did not connect the stories into a more complete picture of the school culture or relate the stories to their own practices in meaningful ways. This pattern of dealing individually with multiple fragments without creating an overriding understanding with which to make sense of the pieces extended into the way the teachers approached their own practices as well. Some groups were clearly overwhelmed when given the task of thinking about their instruction, and did not appear to have the skills to see or construct relationships between the many components of their professional lives. This was most apparent in the teachers' conversations about curriculum, assessment and instruction.

In early dialogues, teachers talked about curriculum, assessment, and instruction almost as if they were independent from one another. Each group identified concerns about one of these three domains, but that concern did not generally extend to the other domains. One group, for example, was extremely concerned about how their decisions would connect their practices to their state standards, but demonstrated little concern with how those same decisions might connect their practices to the high-stakes statewide assessment. In another group, when we asked them to describe what their students were doing and learning, the teachers failed to recognize this as an assessment problem and instead fell back on a discussion about their delivery of content standards. In many conversations, the close connections between these components of the educational system actually derailed the dialogue; the links presented teachers with a maze of paths to follow but no way to choose between them. The resulting conversations felt almost random, with no order to the topics.

It is critical to note that teachers felt they must be able to work in a detailed way with each piece of the system independently. They spend a great deal of time working with the human perspectives that their classrooms and students provide, making minute and constant adjustment to the tone and texture of the classroom experience. But if we are to create opportunities for better learning about teaching as a means to improving instructional practices, then teachers also must be able to shift frequently and easily to a broader, more comprehensive perspective.

Helping teachers develop a big picture for themselves in which all the parts had clear and meaningful relationships presented us with our greatest challenge. The groups that were most successful began with a concern about one of the three—curriculum, assessment, or instruction—and over time built an understanding of how it related to the other parts of the system. Starting simple may have helped prevent the group from feeling overwhelmed. A group could take on an investigation of assessment, for example, which in turn led to opportunities for teachers to discuss its relationship to curriculum and instruction. But the most important difference between groups that began to create more coherent understandings and those that kept wandering among fragmented pieces was that the former focused specifically on what the implications meant for learners. As groups spent time talking about these issues, they were better able to understand and consider the importance of making the connections between curriculum, assessment, and instruction for the learner. It also worked the other way. An understanding of the connections helped a group see the need to focus on student learning. They would argue, for example, that designing a classroom assessment required establishing clear learning

targets in conjunction with selecting important content for students to learn and appropriate instructional strategies to support their learning.

The four tensions described above first appeared in discussions at the group level, but eventually emerged in the comments and writings of individual teachers. The tensions reveal much about the influence of school culture on the ways teachers' understand their work and learning. We began looking for ways to organize our information to describe the development of an individual teachers' more sophisticated understanding of learning and more coherent approach to practice.

Individual findings

As we analyzed individual teachers' journals and conversations, we saw connections to the tensions identified in the group conversations. At first we assumed each tension could be represented as a simple polar dichotomy, like up and down; but we were surprised to see when we looked more closely that each actually resolved into two continua. For example, when a teacher told us she had to use a district curriculum that she did not think was very good, she described the influence of external authority on her practice. But when she described what she actually did in the classroom, she revealed that she ignored the required curriculum and did the same units she had been doing for years. We were initially confused by the apparent contradiction in these two reports, but we realized that the teacher was describing two closely related but different questions. One involves a teacher's justification for what happens in the classroom; the second can be seen as a report of action itself.

Using the set of polarities for each of the first three tensions discussed above, we identified six "dimensions" with which we could categorize the positions and actions of the teachers. After a very brief description of these, a longer analysis of each follows to show how teachers related these themes to one another and moved within them while investigating their practices. The table on the next page shows the relationship between the first three tensions, the six dimensions that we developed to think about the tensions, and the polarities that define the end-points of each of the dimensional continuum.

TENSION	*DIMENSION*	*POLARITIES*
Responsibility	Authority	External vs. internal
	Agency	Helpless vs. enabled
Professional culture	Professionalism	Work vs. profession
	Collaboration	Solitary vs. collegial
Focus on learning	Sources of Knowledge	Given vs. constructed
	Instructional	Didactic vs. facilitative

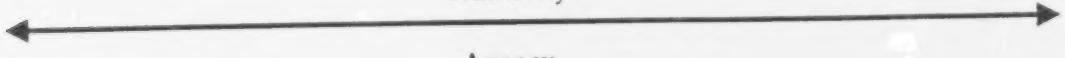
The first tension represents how teachers' describe who is responsible for student learning. One dimension describes how teachers justify their authority for decisions, often using external authority as a shield to protect themselves. The second dimension emerged from the effects –or lack of– that teachers felt they were having on student performance. Again, the first is perspective driven and the second more action driven, but both emerged from discussions about who is responsible for student performance.

Responsibility

External
Instructional decisions depend on external policies, conditions or structures

Internal
Instructional decisions are based on personal knowledge of student needs

Authority



Agency

Helpless
Student success is independent of teacher action and adjustments to curricula.

Enabled
Student success depends on teachers' actions and adjustments to student needs.

Two distinct dimensions could be identified around the second tension, professional culture, as well. The first describes how teachers perceive their professional obligations. The second, more action oriented, describes how teachers actually work together as professionals. We found some teachers thought of themselves as lone rangers, while others saw themselves as parts of collaborative teams.

Professional Culture

Work
Sees teaching as a job to be done based on application of existing skills.

Profession
Sees teaching as a profession that requires continual growth of skills.

Professionalism

Collaboration

Solitary
Teaching is a solitary act best done alone the classroom.

Collegial
Teaching is a collegial act best done in collaboration with other teachers and their classrooms.

The third tension captures teachers' perceptions of the relationship between knowledge and learning. Since teaching requires teachers to support learning in the classroom, this tension focuses more centrally on instructional practice than the other two. One dimension describes the perceived relationship between how knowledge is generated and how learning occurs. The action dimension describes how and to what end teachers use their understanding of how learning happens in their classroom instruction.

Focus on Learning

Given
Teachers believe that knowledge is transmitted

Constructed
Teachers believe that knowledge is constructed

Sources of Knowledge

Instructional approach

Didactic
Teacher delivers content complete to students through presentation and lecture.

Facilitative
Teacher creates an environment that encourages students to seek knowledge and find personal meaning in that knowledge.

How teachers justified instructional decisions .

Teachers frequently justified their instructional decisions by relying on sources of authority that were external to themselves, such as textbooks or state and local curriculum guides, frameworks, standards, or assessments. One teacher said she thought that it was

industry that told teachers and schools what to do. Early in the project, it was common to hear short comments about authority that suggested little questioning of the appropriateness of the source.

I teach what's in the framework.

I use the adopted texts plus the materials that the district contributes. Everything hinges on the AP test.

Curriculum is dictated by the book because of the sequential order of the explanations, it is hard to take them out of order.

One teacher, new to her district, was looking for these sources of authority when she asked, "I want to know why this district does not have curriculum guides for every subject like every other place I've ever been?"

Some teachers talked about the standardized test and, while they seemed unhappy about the influence of the test on their teaching, there was little to indicate that they saw how to change their response.

I follow the [national test]. I don't agree with it. It is only testing how well you take a test.

I don't believe true student-centered learning will occur as long as the state test is around...it has limited my teaching.

Later in the project, it was more common for teachers to emphasize their own role in making sense of the standards, curriculum, assessment, and instruction. Some of these teachers developed understanding through involvement in the project, while others already had confidence in their own authority and expertise. One teacher explained how dialogue with her colleagues influenced her decision-making.

I followed the teacher's manuals faithfully. I figured that these people had done a lot of research and knew more than I did, so use it. Now, I have more confidence in me. Having the time to talk to other teachers and hear their views has helped me to have the

courage to try some different things. Now, my objective before I begin a lesson, is that both my students and myself know what is important and what is expected of them and from me.

She talked about gaining the confidence and courage to make her own decisions. Others talked about how they had made sense of the balance between external and internal sources of authority.

When I first started teaching, I took out the curriculum book and kind of checked off things as I did them...now I use the NCTM standards as kind of a guide, how and what needs to be taught, maybe less the how—you can still teach in your own style and draw your content from the standards.

I try to balance the process orientation that I know is best for the kids with the real world of standardized tests. When it comes down to it they have to prove it for themselves and, if I don't do that and assist them with it, then I have failed because I haven't prepared them for the real world.

I am covering what the state wants me to cover not because the state wants me to cover it but because I think that is what ought to be done.

This theme extended into the teachers' professional vision of teaching as well. One teacher told us

My thoughts at this point are that we as teachers must take primary responsibility for the learning that does or does not take place in our classrooms. The bottom line is that we are supposed to be knowledgeable about our subject matter, educated about the way people learn, excited enough to motivate our students, and someone our students like and respect enough to look forward to see everyday.

Most teachers changed their perspectives on the source of authority for instructional decisions over the course of their conversations. We described one teacher's insights about curriculum in a previous section. She began with the reference to "they" who write curriculum, and she believed that she was constrained by this curriculum. This teacher relied on external authority, but felt resentful of the power that she perceived these authorities held over her. She said, "The test drives curriculum...and when I am

insecure about what I am teaching, I go back to the textbook." Later she said, "The test has been driving my curriculum. I don't like it, it is not right." She talked the same way about instruction, saying, "In the first semester, I tried to do the reading program as it is supposed to be taught according to the training, but now I am making modifications." Near the end of the project, she said, "It is empowering to realize you don't have to teach everything in the book or whatever, that less is more…you don't have to do it exactly like everyone else…I am learning to stop saying 'they made us do this.' I can change, and I can change them." She became a leader during curriculum meetings at her school, changed many aspects of her practice, and learned to trust her own judgment.

Teachers who were more coherent in their approaches, or who became more coherent over the course of the project, justified their decisions by relying more on their own expertise and that of colleagues than on the dictates of external sources. They did not ignore those external sources that had meaning for them and made sense to them, but used them as guidelines. Their focus on students and student learning helped them to determine what to use and how to use external resources. Few teachers were explicit about this connection, but it was evident in their stories and anecdotes. One teacher described a lesson she developed with attention to both the state standards and the group's list of learning principles, ending with

I believe this lesson covered all of our principles of learning. It was one of the most exciting projects I have done this year. Not in terms of teacher accolades (although they are nice) but the excitement, the effort, the feeling the boys had of accomplishment, even their frustration when the chosen experiment didn't work out. The learning was so great, the bell caught us still busy, oblivious of time. It was great to reaffirm that learning belongs to the student.

This concept of authority is dependent on views of knowledge about teaching and who has the power to generate that knowledge. In the beginning of the project, most teachers thought of themselves as users of knowledge, which was generated by experts outside of their school. As teachers, they relied on the authority of those others to guide their practice. As the project progressed, more teachers recognized the value of the knowledge that they and their colleagues had gained through experience and, perhaps more importantly, through reflection on that experience. They should be able to, and have the authority to, make good judgments about their practice because they have this practical knowledge—this professional expertise. As teachers develop a reliance on their

understanding of and focus on student learning, they also begin to feel that they have a significant impact on the learning that goes on in their classroom.

How teachers described their impact on student learning

To develop a sense of control over their decision making, teachers must believe that they have the power to take action and that their action will impact student learning. Some teachers in the study groups felt that they did not have a significant impact on student learning. One consultant told us

These teachers were convinced that the children of today don't learn, don't want to learn, and will not learn. They blamed everything but themselves for the problem. I could not get them to really talk about how they are related to the problem.

One of the teachers in this group confirmed this view when she said, "What are we seeing in the classroom today? Across the board, I am not sure what is causing student's lower level. Work ethics? Peer pressures? Extra-curricular activities? Parent's lack of interest?" However, as this group talked and reflected, there were some who made a commitment to change practice, realizing their impact on student learning. Typical of the comments of these, one teacher said, "After some of the sessions, I go into class and want to be a better teacher. I want to assume some of the responsibility for why these kids don't learn." A teacher in another group talked about curriculum, saying

I must defend my position and practice and explain to parents that although I don't use a text, my curriculum continues to follow district policy that adheres to the NCTM standards. I also try to explain that I believe my program does more for student learning and understanding than the text does...it teaches reasoning and understanding and helps their child to become a better mathematician...I am convinced I am doing the best for my students and I have research to back me up.

As the year progressed, more teachers talked about the impact of their actions on student learning, and began to do something about it. One teacher told us that she was "re-thinking the ways I do things." Another said, "I have been trying to look at my kids again, to see where their needs are, to figure out how to meet the needs of all of my kids." By the end of the year, almost all of the teachers felt they had the power and responsibility to take action within their classroom to improve learning for children. One

teacher summed up the importance of this perspective when she said, "I see many students who came to middle school so convinced they couldn't do, couldn't learn, couldn't succeed academically...I wonder how many of us realize the depth of our influence." Another teacher talked about the importance of her understanding of learning.

The greatest ah-ha was turning instructional principles into learning principles. I ask myself, what can I do to guide them to learning, but it is not my show. I am more learner-centered, not so teacher-centered, so now I tell myself, "don't talk so much, let them do more." I pulled out all of my files of winter activities and sifted through them, deciding what were the main things for kids to know and getting rid of some of my favorite "cute" things. Now I personally decide and have ownership.

Cochran-Smith and Lytle (1999) wrote, "when teachers work in inquiry communities, they enter with others into 'a common search' for meaning in their work lives" (p. 294). Many of the teachers in our project realized they derived the meaning in their work from the impact they were having on student learning. They were making clearer connections between student learning and their teaching strategies and could explain their choices to others. As the teachers developed a sense of their control over their impact on student learning, they began to consider themselves more as professionals.

How teachers viewed their professional role

The teachers sometimes talked about teaching as a job, and, at other times, as a profession. Darling-Hammond (1996) described the professional teacher as "one who learns from teaching rather than as one who has finished learning how to teach" (p. 9). Professionalism, according to Darling-Hammond, involves inquiry centered on critical activities of teaching and learning that grows from investigations of practice and is "built on substantial professional discourse that fosters analysis and communication about practices and values" (p. 9). Therefore, we would expect teachers who viewed teaching more as a profession than a job to talk about inquiry, analysis, reflection, learning with colleagues, and making thoughtful decisions about curriculum, instruction, and assessment.

It was apparent that the teachers we worked with had a vision of what it was to be a professional, as evidenced by their concerns about what was happening to the profession and to them as teachers.

I wonder how often we come across to our students as being bored with our jobs. Do we convey a sense of excitement about teaching? Or do we always act as if it is a tedious chore we must simply get through in order to draw a paycheck?

As it is, we do the hierarchy of needs—we do the classroom first—and don't have time for the other stuff like getting together as professionals.

I think what happens to most teachers is that we are given a few pieces of methodology from a variety of sources and told to put them together in a coherent manner. We are expected to perform a variety of services and meet certain criteria and of course, prepare the students to function in a world that is changing so rapidly no one can keep up. No wonder teachers are stressed out.

One huge concern that I have is the chore of being a teacher compared to the joy of teaching is beginning to take over the profession of being an educator... I really think that educators should be constantly checking their students' comprehension, skill development, and understanding.

As the group conversations progressed, we heard the theme of professionalism emerge as it related to curriculum, instruction, and assessment. A more professional attitude is shown when a teacher takes responsibility for her own learning and has a clear understanding of how she can best improve her practice. Early in the year a teacher told us,

What I want to do is be sent to a workshop this summer for math...I would like to be sent to a workshop on hands-on science...I would like to go to a social behavior workshop...I guess I just want to get an array of ways of teaching.

She did not seem to have a plan nor was she clear about her role in her learning. Later in the project, she said, "This group has been the most important thing I've done this year." She went on to describe how the group had helped her learn how to make better curricular decisions for her special education students, saying,

I was trying to do everything I thought I was supposed to do, now I am thinking more about what is important for my students. Like right now I am wondering if cursive is

really that important, so I focus on our printing and trying to get sentences right. And when are they going to use roman numerals. You look through the books and realize that some of the stuff is just not useful, when are they going to use it? So I am doing less stuff, but more activities on that important stuff. Having the group to reflect with helped me look at that so instead of worrying how I was going to get all of this done, rushing all of the time, I cut out a lot and focused on what was important for these kids.

This teacher has become more thoughtful and reflective about what she was teaching, a move toward having a professional orientation to her work. This passage also ties together the development of an interconnected set of perspectives all relying on her realization that her actions impact her students' learning, and that, as a professional, she is being thoughtful about her instructional decisions.

The teacher above began questioning what was important to teach; others questioned different aspects of their practice as they became more reflective, professional teachers. One teacher talked about assessment, saying, "I had never used self-assessment with my students before. Being in the study group has changed the way I grade students…[my approach] says that the grade on a test isn't the most significant thing—the learning is."

When viewing teaching more as a profession than as a job, teachers began to mention the relationship of professional activities beyond the classroom to their instructional activities. Some reported that they were speaking up more often in faculty meetings, sharing their learnings from the group work with other teachers in and out of faculty meetings, and influencing the process for making decisions in these meetings. Some teachers at one site attempted to involve the rest of their faculty in a dialogue patterned after the study group meetings, but found that other teachers were not ready for or receptive to their efforts. Teachers from each group attended a conference of educators in their state and confidently reported on their experiences. Many at those meetings, including higher education faculty and state department officials, commented on the teachers' expertise.

Clement and Vandenberghe (2000) talked about professionalism in terms of control, accountability, and flexibility. They portrayed teachers' professionalism as being in one of three categories. Reactionary teachers are those who have no control over their work, restrict themselves to their classroom practice, work on their own, do not keep up with innovations, show no flexibility, and generally do not feel good about their work. Conservative teachers have control over their work, but feel strongly that they don't need

to change and so they restrict their work to their own classroom. Progressive professionals have control over their work, account for what they do by referring to the well being of the students, invest in working as a professional team member, and are eager to refine their practices. One teacher we spoke with expressed this view when she said,

We have a new respect for what each other does on a daily basis...how each of us is committed to children, to education, to the profession of teaching...we support each other, assist each other, and grow to be better educators through meeting, through talking.

Teachers we worked with could be placed in each of these groups, but over the course of the work, more of the teachers appeared to have the characteristics of progressive professionals. They looked at the study group meetings as learning experiences and clearly valued the collaboration with their peers whom they considered to be professionals.

How teachers valued opportunities for professional dialogue

In an article on the changing context of teaching in the new century, Lieberman and Miller (2000) reflect the opinions of many researchers when they write that teachers will have to make the transition from individualism to professional community. They continue: "...by forgoing individual work for joint work, teachers can build a strong school culture that values collegiality, openness, and trust over detachment and territoriality" (p. 51). Since we designed the group discussions to elicit and support teacher dialogue, we expected and found that the teachers made many comments about collegiality and collaboration. Although some researchers have defined these terms differently, the teachers we worked with used them synonymously to refer to a relationship that begins with sharing and learning together and leads to the development of interdependence.

Collaboration was not the initial norm at any of the study sites, although one middle school site exhibited an immediate willingness to build on a pre-existing strong team spirit. Early conversations about collaboration and collegiality gravitated toward the lack of time and support to get together with colleagues. The teachers talked about district efforts to promote collaborative planning, usually around curriculum, that were not highly effective, either because of the way the district implemented the planned collegiality or the way the teachers interpreted the purpose.

We need to talk so badly. We're not given that opportunity...We can't get together because of the way the school and system is structured...This year our district finally adopted one early release day per month for teacher planning. However, our time is spent listening to talking heads who offer us no growth.

Teachers do have blocks of time to meet together at this school...most teachers use this time to catch up on grading and planning instead of working with other teachers.

First grade plans together and they coordinate their units... Kindergarten does not and part of the reason is that three of us have been teaching a long, long time. And each of us has developed our own pattern. For example, when we talked about trying to teach units together...doing dinosaurs in October doesn't make sense to me and neither of us was willing to change out minds.

Some teachers lamented their isolation—describing their peers as competitive and unwilling to share their ideas and characterizing their school as having a climate of distrust. Others said that, while they collaborated with teachers on their grade level, it was uncommon to have meaningful conversations with teachers from other grade levels. Overall, there was a consensus that teachers *should be* having conversations with colleagues but that these did not typically occur in their schools. This theme came out early in our work, usually when teachers were talking about curriculum or instruction. One teacher talked about curriculum, saying, "When I was younger, I did things just to get by, but now I am refining my program, and I crave collegiality. I want to talk to others, to make my program good." Another was thinking of instruction when she noted, "We use each other as sounding boards, as far as what works and what doesn't work… Personally, it has helped me in terms of how to teach."

Toward the end of the year, teachers in each group talked about the value of having professional dialogue with colleagues, often equating dialogue with learning.

You should have someone to share with, to talk with about teaching, about being a professional.

In order to grow professionally and personally, it seems that collegial support needs to be there.

Each time we meet I learn a little more.

Talking with other teachers, many of whom have taught longer than me, has broadened my perspective on education. This is the first time I've considered the impact that society has on my teaching. This is the first time I've taken a close look at trends in education, and why those trends are occurring. This is the first time I've had the opportunity to discuss at length teaching practices with teachers from the upper grades.

One teacher talked about her realization that her learning is an important product of collegial dialogue. She said,

This was a very productive meeting. I've accepted the fact that we're not changing the world. It's O.K. with me to come to this meeting and not have a final product. Perhaps we are the final product. Perhaps we will not make a difference by writing the Science Curriculum of the world, ... but rather by the changes that are occurring within ourselves. I believe that I have a lot to share with others. I'm excited about what I'm carrying into my classroom. I believe that perhaps it's not altogether what we're teaching, but also how you approach it.

Many teachers talked about their personal and professional growth as a result of their dialogue with colleagues. Little (1990) described variants of collegiality that form a continuum from independence to interdependence, recently confirmed by Clement and Vandenberghe (2000), progressing from storytelling and small talk, to offers of help, to sharing of ideas, and finally to joint work. We had similar experiences, although the endpoint the teachers reached enabled them to develop new perspectives that increased their understanding of teaching, learning, and knowledge.

How teachers believed knowledge was generated

We heard many comments from the teachers suggesting that they believed that knowledge exists independently of the knower and is transmitted in whole pieces during the learning process. According to this commonly held view, knowledge is produced by university scholars or researchers and transmitted to teachers; content knowledge is produced by experts and transmitted to teachers, who in turn transmit the knowledge to students. In connection with curriculum, instruction, and assessment, teachers talked about knowledge this way early in their discussions.

New knowledge comes from the teacher and we know students have learned it when they can apply it or demonstrate it.

How do I give all the knowledge I have to these students?

It is more important to know where knowledge resides than to know the answer to the specific question.

Beliefs about knowledge influence the way one understands learning and teaching. Some teachers had a different view of knowledge, one that eventually spread to the majority of teachers. One teacher expressed her ideas about children and knowledge, saying that most of the time "children are not given opportunities to make sense on their own. The teacher has the sole role of sense-maker. The kids just do it for that day." Later, she went on to illustrate her understanding that children construct knowledge.

Rather than giving students a formula to remember, they construct their own meaning based on their prior knowledge...I am convinced that teaching students to memorize algorithms harms their ability to reason and truly problem solve.

Accounts like hers became more common among the teachers as the year progressed. Teachers tried new approaches in their classrooms that they justified by arguing that knowledge is constructed, not transmitted intact.

Many teachers initially expected the project staff to provide them with knowledge of teaching that would solve their problems. However, through the project, they began to value the dialogue because they saw how it helped them develop greater understanding. That is, they began to see themselves and their colleagues as generators of knowledge (Cochran-Smith, 1994; Marble, 1997), leading several teachers to call study group participation the best professional development they had ever had. Their view of their classroom practice changed as they came to view knowledge as constructed and saw that "learning was no longer passively receiving knowledge and teaching was no longer dispensed expertise" (Marble, p. 61). Their more sophisticated understanding of knowledge and learning supported teachers in making changes to improve their instructional strategies.

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How perspectives on learning impacted teachers' approaches to instruction

Current understanding of learning encourages teachers to very purposefully structure learning experiences so students actively construct meaning. Early in the project, we intentionally challenged teachers to confront and share their understandings of how students learn. As these ideas became clearer, we pushed them to look for ways to construct their instruction to capitalize on their knowledge. As we listened to the teachers talk over the course of the project, we heard evidence that most were changing their approaches and creating more student-centered classrooms or, at the very least, they were developing a rationale for making changes.

Many teachers initially talked about control issues. One said, "I'm afraid to let go of control, to have faith in the kids that they want to learn." When the teachers at one site shared curriculum and instructional ideas, the consultant reported that "the group as a whole was primarily concerned with managing students and materials…no one questioned the nature of the curriculum that she was implementing."

As they continued to meet and dialogue, more teachers used their understanding of learning to think about their approaches. For example, one teacher, thinking about curriculum, asked, "Should we teach units that are not part of the everyday experience of the children?" Another, talking about instruction, suggested that "we could use their questions to guide our lessons, find out what they know." One teacher was considering assessment when she suggested that "having various learning tasks, such as project, collaborative learning task, test, journals, could give us a better view of the extent and breadth of a child's knowledge of a subject."

The study groups provided the motivation to find and explore new practices. In all of the groups, teachers reported new strategies that they were trying and connected them to their understanding of and focus on learning. One teacher changed her approach to assessment.

I am excited about alternative assessments and have found that I truly can find out more about what my students learn by using more than one assessment for a skill. For example, reading comprehension, now, my students write summaries, draw pictures, answer questions about the story, partner read, group read, write second summaries after discussions, compare their second summaries to their first summaries and so on. I feel that I have a better understanding of what they're learning and what they need to learn.

Another teacher talked about instruction.

The whole way I teach has changed. I have incorporated Montessori methods for reading. I am not a Montessori teacher, but this is the approach that works best for my kids...these kids have not seen much success...they come into my room and they know what to do and they have successes every day.

Toward a framework for understanding teachers' perspectives on teaching and learning

Teachers engaged in systemic reform commonly heap overflowing praise and positive feedback on those helping put the reform in place. In the desperate search to improve their practices, teachers tend to latch enthusiastically on to *any* way of working that makes them feel better about themselves and their role in schooling. Amidst all the good feelings and self-congratulatory rhetoric, distinguishing which contributions had important impacts on teachers' practices from those that simply made them feel better can be difficult if not impossible. We wanted assurances that the changes our teachers reported were both real and driven by the process we had established.

Our efforts differed from typical reform activities in one very important way: we offered no tested, standardized, pre-designed implementation that promised to fix whatever the problem might be. Each study group met on its own terms, focused on its own issues, and addressed its own concerns. This made "success" more difficult to determine because there was no adoption or implementation to watch come into practice. Instead we focused on the orientation of the teachers' conversations, listening carefully for a shift in their focus. If teachers began to think about their practices in new and different ways, we reasoned, we could assert our impact on their approaches to instruction. Our major contribution was to support those conversations and, whenever possible, re-center the dialogue on the learning outcomes the teachers were observing. The cultural habits of teaching made this more difficult than we expected. However, it also proved more powerful than we could have hoped.

Participating teachers gained much more than an opportunity to explore their practices in a professional learning community. Critical changes in instructional perspective and action occurred when teachers' conversations moved from a focus on teaching to one on learning. As teachers began to more closely consider the impact their classroom practices were having on students, the host of issues and distractions blocking their path to positive action began to dissolve. The excitement became physically

contagious as teachers began to talk openly about their practices, eagerly sharing how their students' had reacted to even small changes in assessment or instruction.

"Turning the corner" in their consideration of teaching and learning was a critical step. Once focused on learning and learners, the teachers discovered new relationships between curriculum, instruction, and assessment. Their conversations moved from "passive reaction" to "understanding action" in the classroom. That is, they were now able to act from a more sophisticated understanding of learning magnified by their growing expertise. The teachers began to recognize clear relationships between their practices and student performance. The positive energy lifted the teachers in many important ways, a significant outcome of the year's work.

A framework for changing teacher perspectives

Each teacher who participated in the study group for the full year made strides toward developing a focus on the learner, and most made specific, observable changes in their classroom practice based on this new perspective. As the project progressed, we found that the participating teachers increasingly:

- justified their decisions by relying on their own expertise and that of colleagues;
- felt that they could have a significant impact on student learning;
- viewed teaching as a profession rather than as a job;
- valued dialogue with their colleagues as a learning experience;
- believed that learners construct knowledge; and
- utilized approaches to instruction more consistent with their understanding of learning.

We sought to create tools that promoted these desirable changes in how teachers saw themselves, their students and their roles as teachers. In order to track our own success, we needed some way to assess these understandings and to follow their development over time. Beginning with the four "domains" (vision of teaching, curriculum, assessment, and instruction) we had initially focused on, we sorted the teachers' comments and our observations of their conversations and practices. We quickly realized that the teachers' comments sorted just as easily into the four domains as they did into the six "dimensions" (authority, agency, professionalism, collaboration, knowledge and instruction). Even more interesting, we found a distinct but related value

for each dimension within each of the domains. That is to say, the dimension that described the source of knowledge had expressions in each of domains.

To see this more clearly, let's consider a concrete example of how each dimension can be expressed within each of the four domains. One issue for teachers was deciding whom to listen to among the many voices telling them what to do. In the beginning, we saw more teachers who relied on external sources of authority for each of the domains. For example, a teacher closely followed a textbook as the external source of authority for curriculum, saying that the experts who wrote the textbook knew what was important to teach and in what order and depth topics should be covered. This teacher relied on the teacher's guide to the textbook as the source of authority for instructional strategies to use to teach science, and the textbook exams as the sole means of assessment, again deferring to the experts who developed the strategies and examinations. This teacher's vision of teaching was defined by how well the externally defined lessons were replicated, and this was determined by a supervisor's evaluation.

As the group discussions progressed, we saw that more teachers justified their decisions about classroom curriculum, instruction, and assessment by relying on their own expertise. These teachers also became more confident in critiquing their professional learning needs. Teachers' notions of professionalism provide a second example of how a dimension shows up across domains. When teachers adopted a professional view of teaching, they took it as their responsibility to examine, discuss, critique, and modify their curriculum, their instructional practices, and the assessments they used to make sure each centered on student learning.

When the dimensions and domains are linked together, they provide a powerful way to characterize how the teachers' perspectives change over time. There appears to be a definite and describable relationship between these two ways of considering teachers' perspectives on their practice. We developed a simple matrix to chart this relationship,.

Table 1: Matrix relating teachers' perspectives on domains and dimensions

Domains Dimensions	Vision of teaching	Curriculum	Assessment	Teaching and learning
Authority				
Agency				
Professionalism				
Collaboration				
Knowledge				
Instruction				

Crossing the four domains (curriculum, instruction, assessment, and vision) with the six dimensions provides us with an analysis framework for capturing individual teachers' perspectives of their practice and analyzing changes in their understanding. For example, there were many teachers who initially felt that the state or standardized national assessment was the only legitimate authority for measuring the success of their students. Their authority for assessment was external, based on the standardized assessment. This perspective also influenced their approach to curriculum and teaching: they felt compelled to cover required material, pacing themselves to be sure everything was covered, if not learned. Their sense of their own agency for student success was also profoundly influenced, as these external authorities offer little guidance beyond teaching test-taking skills in considering how to help students succeed. As teachers explored the issue in the community of other teachers, however, many discovered that valid alternatives to the standardized assessments exist, often providing more immediate information to teachers when they need it to make effective instructional choices. This change in their understanding of assessment caused a reconsideration of their curricular choices, approaches to teaching, and their understanding of their potential for impacting student learning. In using the framework matrix in Table 1, we now have a strategy for assessing teachers' perspectives and sorting them into related, interconnected cells.

Using stance to describe teachers' thinking

There are strong similarities between the positions described by cells in the framework presented in Table 1 and the theoretical construct of "stance" as the positioning involved in teaching (Berghoff, 1997; Cochran-Smith, 1994). Berghoff (1997) reviewed the use of the concept and found that "stance" generally refers to "how we position ourselves in a given context" (p. 3). According to Berghoff, the essential idea behind stance is that there are

> ...multiple positions possible in any context, each with its own set of possibilities, but none with the potential for exposing everything...Stance is a relational concept. One can only assume a stance in relationship to something or someone. As teachers, we assign students a position relative to ourselves when we assume a stance...It makes a difference where we choose to stand. (p. 4, 8)

Like many of the teachers we worked with in the group sessions, individuals are socialized into a culture and belong to discourse communities (or social systems) within that culture. As a result we can be (and teachers often are) "socialized into a stance, an

ideological position or orientation, that is suited to the discourse in which we participate" (Berghoff, p. 6). Stance, then, is a positioning of teachers relative to some object of their practice. Most new teachers develop their educational stances during their socialization into a school's culture after they are hired. This could account for the early difficulties we had when teachers were invited to work together. Asked to work in ways outside of their long-standing orientations to collegial relationships, the teachers had no experience or values for the new ways of working and struggled to develop new orientations to collegiality.

Berghoff's analysis provides a tantalizing glimpse into the value of this concept, but leaves the strong impression that stance is passive, social, and static. However, another way of thinking about stance promotes it as an active, personal, and dynamic construct. Cochran-Smith (1994) described how teacher research influenced the development of pre-service teachers' stance toward being teachers.

> The power of teacher research can only be regarded in terms of its value as a vehicle to help student teachers develop a stance—that is, a way of positioning themselves as prospective teachers...in relation to (a) knowledge (i.e., their positions as generators as well as users of knowledge for and about teaching), (b) agency (i.e., their positions as activists and agents for school and social change), and (c) in terms of collaboration (i.e., their positions as professional colleagues in relation to other teachers, to administrators and policymakers, and to their own students). (1994, p. 151, 152)

She described a program designed to help students develop a "stance of teaching against the grain." Cochran-Smith and Lytle (1999) later talked about "inquiry as stance" to describe the positions taken by teachers working together in inquiry communities toward knowledge and practice. By developing the student teacher's stance before the socializing power of school culture becomes the only major influence on their thinking, Cochran-Smith sought to neutralize the strong normative qualities of that socialization. Used this way, stance is intentional, the conscious choosing of a position. Although the default in the current system may be defined by the existing school culture, we are not trapped and, once aware of alternative perspectives, can intentionally make choices that change our position or stance. That stance is intentional implies that it is fluid, changeable, and is based on personal values as well as on social ones.

Marble (1997) expanded this view, adding that "'stance' includes more than relative position; it also connotes attitude" (p. 61). Stance is not simply a place to be looking from or a position, but more complexly a way of 'thinking and acting about.' He

described a program in which student teachers created school portraits as a research project. The portrait experiences were "intense, emotional learning activities with high stakes implications for the learners...Each of the portrait teams chose a different point of view for their research outside the typical perspective of teachers" (p. 60-61). Through the process, they became generators and pursuers of knowledge, rather than receivers of knowledge. They learned that there are "multiple ways of knowing and understanding any particular event or situation" and were, thus, "no longer tied to the search for the correct way to teach" (p. 61-62). In constructing their own knowledge about schools and schooling, these students became critical actors in the school story.

Stance, as Marble described it, is a teachers' dynamic relationship to important elements of practice, including others (colleagues and students alike); knowledge; action; and visions of schooling. In the example above, he noted that the student teachers' stance shifted when they realized that they had generated new and worthwhile knowledge about their school context, including important explanations for the impacts of school culture on teaching. This enabled them to combine their own perspectives and expertise with those of experienced teachers during the process of learning to teach.

The notion of stance as a changeable, intentional positioning of self relative to some object of practice helped us understand how the teachers in our study groups worked as individuals within their larger school cultures. Taking the perspective of stance, we approached the dimensions as a way to describe the teachers'

Stance toward authority
Stance toward agency
Stance toward professionalism
Stance toward collaboration
Stance toward knowledge
Stance toward instruction

As we listened, the teachers developed new positions toward each of the six dimensions—authority, agency, professionalism, collaboration, knowledge, and instruction—with each of the new stances focused on learning and the learner. As teachers developed a stance toward authority that involved relying on their understanding, they became sense-makers who figured out the relationships between external demands, existing structures of and assumptions about schooling, and the learning needs of their students. As they developed a stance toward agency of having the power and

responsibility to impact student learning, teachers took themselves off center-stage and put learning there. As they developed a stance toward teaching as a profession, they took responsibility for their own growth and learning and became thoughtful and reflective practitioners. As they developed a stance toward collaboration as a learning experience, teachers formed an interdependent relationship with their colleagues that provided support for making changes in the classroom. As they developed a stance toward knowledge as constructed, they saw themselves and their students as meaning-makers. And as they developed a stance toward instruction as focused on learning, they changed their classroom approaches to better reflect their understanding of what learning requires.

Using stance to interpret teacher actions

Stance offers a powerful way of thinking about teacher beliefs and attitudes, but also provides a lens through which to view teacher actions as well. The relationship between perspective and action dimensions in the framework makes the connection between the two explicit. When the relationship between what teachers think and what teachers do is clarified, two important outcomes emerge. In the first place, teachers themselves are able to assess how their own beliefs and practices are linked and take steps to adjust and refine as needed. Secondly, new social structures and strategies are developed for dealing with this more public way of thinking about teaching and learning.

We saw plenty of evidence of these outcomes in our work. Increasingly, the teachers we met with were willing to subject their classroom actions to intense scrutiny and critique. Teachers began to question every instructional action by wondering "what does this have to do with learning?" They considered what they believed and understood about learning, refined that understanding by working together, reading, having new experiences, and engaging in dialogue. Their new perspectives helped them make instructional choices about curriculum, assessment, and instruction focused on the learner. In short, the teachers we worked with developed more coherent visions of and approaches to their instruction. One group developed its own set of instructional principles (derived from principles of learning based on their growing understandings of how learning takes place) and began to use these instructional principles as criteria for evaluating the effectiveness of their lesson designs.

The collective aspects of this work bring us to the second major outcome. As they learned to work in a more public way, teachers developed new social structures and strategies to enable them to work more collectively. These structures and strategies supported and further developed the teachers' capacity to become knowing actors. After

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a year of working closely together, strong professional communities emerged that fostered honest, open, and powerful conversations about schooling and practice. These communities did not develop easily or without resistance. Rather, each site required constant monitoring, facilitation, and guidance not only from project staff but from the higher educational consultants as well. But once the teachers began to feel the group efforts were paying off —impacting the way they valued colleagues, students, and their own learning— these learning communities became critically important to their members. At the end of the year, all five sites expressed a strong desire to maintain the relationship and positive support they had received; several groups actively looked for resources to continue their community of inquiry.

Each stance can be seen as a way of thinking about one of the six dimensions (authority, agency, professionalism, collaboration, knowledge and instruction) within the context of one of the four domains (curriculum, instruction, assessment, and professional vision). Collectively, they offer a framework for describing teacher perspectives on teaching and learning and a template for mapping changes in these perspectives over time. The framework also enables educators to identify linkages between these perspectives and instructional decision making.

The framework provides a simplistic but useful tool for helping teachers become more thoughtful about their instruction and how it impacts the learning in the their classrooms. It enables them and those assisting them to develop the "coherence in practice" called for by Cohen (1995) and others. Over time, we saw significant changes in the way teachers talked about their professional tasks. These included a progression from comments that were less reflective to those that were more reflective, from those that were less coherent to those that were more coherent, and from those that illustrated less understanding to those illustrating more understanding. This suggests that paying attention to these "qualities" can help us learn how to support teachers in generating a deeper knowledge of learning and teaching and in constructing coherence in their practice.

Conclusions

Teacher learning is arguably the cornerstone to school reform and improvement. Without carefully considering teacher learning and providing structures to support the growth of teachers' understandings of their practices, school reform efforts are unlikely to be either effective or enduring. The teachers we worked with have heard the deafening call for increased accountability, and realize that, as a critical part of the system, they must

rethink their instructional assumptions and strategies if schools are to improve. Without exception, they were willing to openly explore the role and responsibilities of teachers in the system. They eagerly sought to understand and improve their contributions to overall school success.

But the barrage of mandates, charges, and policy initiatives designed to facilitate and improve their practice has clearly overwhelmed these teachers (and typically most teachers we know). They consistently expressed serious concerns about being caught between larger systemic forces over which they feel teachers have no control, including state assessments, new curricular adoptions, or school improvement plans that have student performance improvements as outcomes. To add to the confusion, the contexts of teaching and schooling limit opportunities for thoughtful practice; few teachers have time to step away from their immediate tasks even a short distance to take in a broad picture and fit these external influences into a meaningful whole. Furthermore, the fractured and isolated nature of schooling fosters a culture of blame among with practitioners at every level convinced that they must work harder because someone somewhere else has not done enough.

Through five study groups, we examined teachers approaches to their own learning and sought to develop strategies, tools, activities, and resources to support teacher growth. We created opportunities for teachers and their colleagues to carefully re-examine how children learn. In the safety of these collegial communities, teachers developed their confidence and refocused their practices. They considered what they believed and understood about learning, refined that understanding by working together, reading, having new experiences, and engaging in dialogue. Most importantly, they moved from a habit of thinking mostly about the instructional problem to a habit of thinking first about the learner. This '*turn to learning*' opened doors to an extensive rethinking of teachers' understandings and approaches to teaching.

The framework we developed enabled us to observe and interpret these changes graphically. The framework captures a wide range of positions and helps sort and relate the many seemingly dispirit issues facing teachers. It also helps teachers understand the connections between their instructional strategies and student learning, providing a means for assessing "coherence in practice."

As professional developers, we learned that incorporating these dimensions in our work with teacher groups can move teachers toward more meaningful and coherent practices. We learned we must challenge teachers to look at teaching and learning in different ways, encourage them to uncover and examine their assumptions and beliefs that

act as barriers to improving practice, and take enough time to help them move beyond blaming to assuming responsibility. Last but not least, we learned that, although helping teachers build new connections and relationships requires intense and honest engagement, the efforts are well worth the rewards.

Implications for future work

As any good carpenter can tell you, you need the right tools for the job. But just having the right tools is not enough; you also must know how and when to use them. The framework we developed from our work in the five study sites is a potentially valuable and useful tool for helping clarify and track teachers' understandings of teaching and learning. But it has not yet had a rigorous test to determine how well it performs when used with a number of teachers. Our next and immediate steps are to put the framework to such a test with a number of new sites. A pre/post survey questionnaire will be developed and used to collect information from teachers as they participate in a study group process. Individuals trained to use many of the activities we developed for use in the five sites will facilitate the study groups and provide information about the participants and their process.

Once we are assured that the framework accurately characterizes what teachers think and do, we will have a powerful tool for working on what is perhaps the most challenging educational problem of all: determining the relationship between teacher learning and student learning. The connection between these two seems intuitive and has been widely assumed, but has not been conclusively studied. Until we have further evidence, however, we must continue to assume that improving teacher learning will result in improved student learning. The collection of further evidence has been hampered by the complexity of the problem. For example, there doesn't appear to be widespread agreement on what "teacher learning" means, making it difficult to focus tightly enough on teacher learning to see important impacts on teachers' practice. We anticipate that the framework we have developed will go a long way toward resolving these problems

Secondly, and just as importantly, the framework can help professional developers support more coherent practices by putting learning at the center of teachers' decision making. Some specific approaches that we would like to highlight for professional developers to incorporate into their work with groups of teachers include

Using dialogue facilitation skills to help teachers learn together.

Actively listening to teachers' issues and then using these as a starting point.

Using activities to help teachers look at teaching and learning in new ways.

Asking questions to help them uncover and examine assumptions and beliefs.

Bringing resources to the table that teachers identify as needed to further their learning.

We have found that the understanding of facilitation, dialogue, and reflection is not widespread among those who currently work with preservice and inservice teachers. This way of working represents a paradigm shift for many of those who would assist teachers, including school district and university faculty. Therefore, we also need to learn more about what these educators require to be better able to facilitate groups of teachers in ways that promote the construction of more coherent practices.

References

Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3-32). San Francisco: Jossey-Bass.

Berghoff, B. (1997). *Stance and teacher education: Understanding the relational nature of teaching.* Revised version of a paper presented at the National Reading Conference, Scottsdale, AZ, December 6, 1997 (ERIC Document Reproduction Service No. ED 424 218).

Carson, T. R. (1986). Closing the gap between research and practice: Conversations as a mode of doing research. *Phenomenology and Pedagogy, 4* (2), 73-85.

Clandinin, D. J., & Connelly, F. M. (1994). Personal experience methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 413-427). London: Sage.

Clement, M., & and Vandenberghe, R. (2000). Teachers' professional development: A solitary or collegial (ad)venture? *Teaching and Teacher Education, 16*, 81-101.

Cochran-Smith, M. (1994). The power of teacher research in teacher education. In S. Hollingsworth & H. Sockett (Eds.), *Teacher research and educational reform: Ninety-third yearbook of the National Society for the Study of Education* (pp. 142-165). Chicago: University of Chicago Press.

Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of knowledge and practice: Teacher learning in community. In the series, *Review of Research in Education, 24*, 249-305. Washington, DC: American Educational Research Association.

Cohen, D. K. (1995). What is the system in systemic reform. *Educational Researcher, 24* (9), 11-17, 31.

Cohen, D. K., & Spillane, J. P. (1994). Policy and practice: The relations between governance and instruction. In N. Cobb (Ed.), *The future of education: Perspectives on national standards in America* (pp. 109-156). New York: College Board.

Coldron, J., & Smith, R. (1995). *Teaching as an amalgam of discourses and the consequent need for appropriate modes of reflection.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 18-22, 1995 (ERIC Document Reproduction Service No. ED 385 493).

Darling-Hammond, L. (1996). The quiet revolution: Rethinking teacher development. *Educational Leadership, 53* (6), 4-10.

Elbaz, F. (1990). Knowledge and discourse: The evolution of research on teacher thinking. In C. Day, M. Pope, & P. Denicolo (Eds.), *Insights into teacher thinking and practice* (pp. 15-42). London: Falmer.

Elmore, R. F. (1996). Getting to scale with good educational practice. *Harvard Educational Review, 66*, 1-26.

Fuhrman, S. H. (1993). The politics of coherence. In S. H. Fuhrman (Ed.), *Designing coherent education policy: Improving the system* (pp. 1-34). San Francisco: Jossey-Bass.

Fullan, M. G. (1996). Turning systemic reform on its head. *Phi Delta Kappan, 77*, 420-423.

Goertz, M. E., Floden, R. E., & O'Day, J. (1996). *Studies of educational reform: Systemic reform*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Grant, S. G., Peterson, P. L., & Shojgreen-Downer, A. (1996). Learning to teach mathematics in the context of systemic reform. *American Educational Research Journal, 33*, 509-541.

Greenleaf, C., Hull, G., & Reilly, B. (1994). Learning from our diverse students: Helping teachers rethink problematic teaching and learning situations. *Teaching and Teacher Education, 10*, 521-541.

Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. New York: Teachers College Press.

Jennings, N. E. (1996). *Interpreting policy in real classrooms: Case studies of state reform and teacher practice*. New York: Teachers College Press.

Johnston, M., & The Educators for Collaborative Change. (1997). *Contradictions in collaboration: New thinking on school/university partnerships*. New York: Teachers College Press.

Knapp, M. S. (1997). Between systemic reforms and the mathematics and science classroom: The dynamics of innovation, implementation, and professional learning. *Review of Educational Research, 67*, 227-266.

Lieberman, A., & Miller, L. (2000). Teaching and teacher development: A new synthesis for a new century. In R. S. Brandt (Ed.), *Education in a new era*. Alexandria, VA: ASCD.

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Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record, 9*, 509-536.

Little, J. W. (1997). *Benchmarks for schools: Excellence in professional development and professional community*. Washington, DC: Office of Educational Research and Improvement.

Marble, S. (1997). Narrative visions of schooling. *Teaching and Teacher Education, 13*, 55-64.

Peterson, P. L., McCarthey, S. J., & Elmore, R. F. (1996). Learning from school restructuring. *American Educational Research Journal, 33*, 119-113.

van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, NY: State University of New York.